

## *Calidris canutus rufa* (Red Knot)

### Priority 1 Species of Greatest Conservation Need (SGCN)

**Class:** *Aves* (Birds)

**Order:** *Charadriiformes* (Plovers, Sandpipers, And Allies)

**Family:** *Scolopacidae* (Curlews, Dowitchers, Godwits, Knots, Phalaropes, Sandpipers, Snipe, Yellowlegs, And Woodcock)

#### General comments:

Peripheral but traditional occurrence with severe range wide declines. Considered Species of High Concern by US Shorebird Conservation Plan. Migration and wintering surveys suggest significant long term (30 yr) and short term (10 yr) regional declines (Andres et al. 2012. Wader Study Group Bulletin 119(3) :178-194.

#### Species Conservation Range Maps for Red Knot:

Town Map: [Calidris canutus rufa Towns.pdf](#)

Subwatershed Map: [Calidris canutus rufa\\_HUC12.pdf](#)

#### SGCN Priority Ranking - Designation Criteria:

##### Risk of Extirpation:

Federal Status: **Threatened**

##### State Special Concern or NMFS Species of Concern:

*Calidris canutus rufa* is listed as a species of Special Concern in Maine.

##### Recent Significant Declines:

Red Knot is currently undergoing steep population declines, which has already led to, or if unchecked is likely to lead to, local extinction and/or range contraction.

Notes:

Peripheral but traditional occurrence with severe range wide declines. Considered Species of High Concern by US Shorebird Conservation Plan. Migration and wintering surveys suggest significant long term (30 yr) and short term (10 yr) regional decline

##### Regional Endemic: NA

##### High Regional Conservation Priority:

**Northeast Regional Synthesis (RSGCN):**

Responsibility: High, Concern: Very High

**United States Shorebird Conservation Plan:**

Highly Imperiled

**North Atlantic Regional Shorebird Plan:**

Highly Imperiled

**United States Birds of Conservation Concern:**

Bird of Conservation Concern in Bird Conservation Regions 14 and/or 30: Yes

##### High Climate Change Vulnerability: NA

##### Understudied rare taxa: NA

##### Historical: NA

##### Culturally Significant: NA

#### Habitats Assigned to Red Knot:

##### Formation Name

##### Cliff & Rock

##### Macrogroup Name

##### Rocky Coast

**Habitat System Name:** Acadian-North Atlantic Rocky Coast **Notes:** *roosting habitat*

**Habitat System Name:** North Atlantic Cobble Shore **Notes:** *roosting and feeding habitat*

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Stressor Priority Level based on Severity and Actionability		Moderate Severity	High Severity
	Highly Actionable	Medium-High	High
	Moderately Actionable	Medium	Medium-High
	Actionable with Difficulty	Low	Low

**IUCN Level 1 Threat Biological Resource Use****IUCN Level 2 Threat:** Fishing and Harvesting of Aquatic Resources**Severity:** Moderate Severity **Actionability:** Highly actionable**Notes:** Activities in the intertidal areas can impact habitat and behavior.**IUCN Level 1 Threat Human Intrusions and Disturbance****IUCN Level 2 Threat:** Recreational Activities**Severity:** Severe **Actionability:** Moderately actionable**Notes:** Reversible through protection of staging habitats with symbolic fencing, outreach, municipal beach management agreements, and municipal ordinance such as leash laws.**IUCN Level 1 Threat Other Options****IUCN Level 2 Threat:** Lack of knowledge**Severity:** Moderate Severity **Actionability:** Highly actionable**Notes:** Need to identify important staging habitats to implement protection initiatives**IUCN Level 1 Threat Residential and Commercial Development****IUCN Level 2 Threat:** Housing and Urban Areas**Severity:** Moderate Severity **Actionability:** Highly actionable**Notes:** Can minimize impacts with recommendations that avoid, mitigate or compensate project impacts through environmental permit review process.**IUCN Level 1 Threat Natural Systems Modifications****IUCN Level 2 Threat:** Other Ecosystem Modifications**Severity:** Moderate Severity **Actionability:** Moderately actionable**Notes:** Jettys, rip rap, seawalls, beach construction: can mitigate impacts through permit review recommendations.**IUCN Level 1 Threat Pollution****IUCN Level 2 Threat:** Industrial and Military Effluents**Severity:** Moderate Severity **Actionability:** Moderately actionable**Notes:** Impacts may be minimized using regulation, contingency planning and clean - up.

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*\*Only species specific conservation actions that address high (red) or medium-high (orange) priority stressors are summarized here.*

Conservation Action	Category:	Biological Priority:	Type:
Partner with municipalities and BP&L to develop beach management agreements to minimize impacts to feeding and roosting red knots using beach habitats.	Species Management	high	new

**Stressor(s) Addressed By This Conservation Action**

Housing and Urban Areas

**Conservation Actions Associated with the Shorebirds Guild:**

Conservation Action	Category:	Biological Priority:	Type:
Identify and map priority feeding and roosting areas including offshore habitats, and implement protection initiatives. Enter data in IFW ETSC database.	Survey and Monitoring	high	on-going

**Stressor(s) Addressed By This Conservation Action**

Lack of knowledge, Industrial and Military Effluents, Housing and Urban Areas, Tourism and Recreational Areas, Commercial and Industrial Areas

Conservation Action	Category:	Biological Priority:	Type:
Place symbolic stake and twine fencing around important beach roosting areas with signage to identify roosting areas.	Species Management	high	new

**Stressor(s) Addressed By This Conservation Action**

Recreational Activities, Tourism and Recreational Areas

Conservation Action	Category:	Biological Priority:	Type:
Work with the Maine Department of Marine Resources to conduct research to determine the impact of macroalgae harvest on wintering waterfowl	Research	high	on-going

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#### Stressor(s) Addressed By This Conservation Action

Fishing and Harvesting of Aquatic Resources

Conservation Action	Category: Public Outreach	Biological Priority: high	Type: on-going
Provide outreach to pet owners, beachgoers, kayakers, beach managers, and landowners to raise public awareness on shorebirds and on the impacts of disturbance from recreational activities in coastal areas.			

#### Stressor(s) Addressed By This Conservation Action

Recreational Activities

Conservation Action	Category: Habitat Management	Biological Priority: moderate	Type: new
Use voluntary agreements, conservation easements, conservation tax abatements and incentives to protect important habitats			

#### Stressor(s) Addressed By This Conservation Action

Work and Other Activities, Recreational Activities, Housing and Urban Areas, Commercial and Industrial Areas

Conservation Action	Category: Survey and Monitoring	Biological Priority: high	Type: on-going
To determine population status continue monitoring program for SGCN shorebird species at high priority migration sites coastwide. Continue to coordinate with ISS, PRISM, Atlantic Flyway ESMP programs.			

#### Stressor(s) Addressed By This Conservation Action

Lack of knowledge

Conservation Action	Category: Research	Biological Priority: high	Type: on-going
Identify prey resources in significant staging areas to determine potential limiting factors and optimal management techniques to promote these resources.			

#### Stressor(s) Addressed By This Conservation Action

Lack of knowledge

Conservation Action	Category: Research	Biological Priority: high	Type: on-going
Determine length of stay at stopover areas, site fidelity, local movements and premigration condition to determine if coastal habitats are meeting shorebird requirements for successful migration.			

#### Stressor(s) Addressed By This Conservation Action

Lack of knowledge

Conservation Action	Category: Research	Biological Priority: moderate	Type: new
Determine limiting factors for SGCN shorebird species on breeding, migratory, or wintering areas.			

#### Stressor(s) Addressed By This Conservation Action

Lack of knowledge

Conservation Action	Category: Research	Biological Priority: high	Type: on-going
Gain a better understanding of the extent and impacts of algae harvesting on staging and wintering shorebirds. Conduct longterm monitoring of ecosystem-wide impacts of cutting algae to determine potential impacts to shorebird habitats and invertebrate pr			

#### Stressor(s) Addressed By This Conservation Action

Fishing and Harvesting of Aquatic Resources

### Broad Taxonomic Group Conservation Actions:

Additional relevant conservation actions for this species are assigned within broader taxonomic groups in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-1.

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**Habitat Based Conservation Actions:**

Additional conservation actions that may benefit habitat(s) associated with this species can be found in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-15. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

*The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.*